# NEW SPECIES OF BUPRESTID BEETLES FROM MEXICO AND CENTRAL AMERICA

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This paper is the result of a study of the beetles of the family Buprestidae from Mexico and Central America found in the collection of the United States National Museum, together with a large number received for identification from H. E. Hinton, of Berkeley, Calif.

Thirty species of eight genera are herein described as new, and through the kindness of Mr. Hinton the type specimens have been placed in the collection of the United States National Museum.

### COLOBOGASTER AUREOVIRIDIS, new species

Female.—Broadly oblong, feebly narrowed in front and behind, and feebly convex; head and antennae aureo-virideous, the latter slightly aeneous; pronotum, scutellum, and elytra aureo-virideous, with a distinct cupreous tinge in certain lights; beneath aureo-virideous, with the tarsal lobes and posterior margin of the second, third, and fourth abdominal segments feebly bluish black.

Head with the front rather flat, uneven, broadly, longitudinally depressed on the front, the depression deeper between the antennal cavities and near the vertex, where there is a vague heart-shaped elevation, and with a narrow, longitudinal groove on the occiput; surface coarsely, irregularly, and more or less confluently punctate, sparsely clothed with inconspicuous hairs, and the intervals finely, densely granulose; epistoma vaguely, broadly, arcuately emarginate in front.

Pronotum moderately, uniformly convex, distinctly narrower at apex than at base, widest near base, with a round, vague depression on each side of middle, and a more distinct depression on each side near posterior angle; sides feebly sinuate, strongly, obliquely expanded from apical angles to near base, then obliquely narrowed to the posterior angles, which are acute, but not projecting beyond the elytra: anterior margin transversely truncate; base broadly.

deeply, arcuately emarginate at middle of each elytron, with the median lobe transversely truncate in front of scutellum; surface rather coarsely, densely, irregularly punctate, smooth in front of scutellum, and the intervals vaguely granulose. Scutellum triangular, acuminate at apex, and the surface finely, densely, vaguely granulose.

Elytra wider than pronotum at base, and slightly wider at base than at middle; humeral angles broadly rounded; sides nearly parallel from base to near middle, then feebly, arcuately narrowed to the tips, which are separately broadly rounded, with a distinct tooth near the sutural margin; surface finely, densely, uniformly punctate, and each elytron with two or three more or less distinct, smooth, longitudinal costae, and a round, deep, basal depression.

Abdomen beneath densely, finely granulose, rather densely, finely, irregularly punctate, and sparsely clothed at sides along anterior margin of segments with long, recumbent, white pubescence; first segment broadly, longitudinally grooved at middle; last segment with two broadly arcuate emarginations at apex, forming a distinct tooth on each side and one at middle of equal length. Prosternum strongly convex, vaguely granulose, sparsely, irregularly punctate, and sparsely clothed with fine, erect, white hairs; anterior margin slightly elevated; prosternal process obliquely expanded posteriorly, with the apex broadly angulated.

Male.—Differs from the female in having the last abdominal segment broadly, feebly, arcuately emarginate at apex, and with a long tooth on each side at the exterior angle.

Length, 26-30 mm; width, 11-12 mm.

Type locality.—Guerrero, Mexico.

Type and allotype.—U.S.N.M. No. 49550.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from three examples (one female type). The type was collected at an altitude of 2,400 feet by William Schaus; the allotype is labeled "Sinaloa, Mexico"; the female paratype was collected at Tejupilco, Mexico, D.F., at an altitude of 3,960 feet, during July 1932, by H. E. Hinton. The two vague, median depressions on the pronotum of the type are entirely absent in the allotype and paratype.

This species resembles *geniculata* Théry, but it differs from that species in having the scutellum elongate triangular, the femora uniformly green, and the last abdominal segment uniformly green, with

the emargination at the apex different.

# COLOBOGASTER GIGAS, new species

Male.—Broadly oblong, vaguely narrowed in front and behind, and feebly convex; head and antennae green, the latter with the

outer joints bluish black on the under side; pronotum aenco-virideous, with the median part irregularly purplish black; scutellum aencous, with a bluish or purplish tinge; elytra uniformly purplish black; beneath green, with the tarsi and posterior margin of abdominal segments (except the first at middle) bluish black.

Head with the front flat, uneven, with an oblong, median elevation behind the epistoma, enclosing a deep, round depression between the antennal cavities, a very strongly elevated, heart-shaped elevation on the vertex, and a narrow, longitudinal groove on the occiput; surface coarsely, irregularly, confluently punctate, the punctures sparser on the heart-shaped elevation, sparsely clothed with erect, inconspicuous hairs, the intervals feebly, densely granulose; epistoma broadly, rather deeply, arcuately emarginate in front.

Pronotum moderately, uniformly convex, distinctly narrower at apex than at base, and widest at base, with a vague depression on each side near posterior angle; sides obliquely expanded from apical angles to middle, then nearly parallel to near the posterior angles, which are acute, but not projecting beyond the elytra; anterior margin transversely truncate; base broadly, deeply, arcuately emarginate at middle of each elytron, with the median lobe transversely subtruncate in front of scutellum; surface finely, densely, irregularly punctate, the intervals vaguely granulose. Scutellum triangular, acuminate at apex, the surface vaguely granulose.

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Elytra wider than pronotum at base, and slightly wider at base than behind middle; humeral angles broadly rounded; sides nearly parallel or feebly narrowed from base to near the tips, which are separately broadly rounded, with a distinct tooth near middle of apex; surface very finely, rather densely, uniformly punctate, and each elytron with two or three vague, smooth, longitudinal costae,

and a round, deep, basal depression.

Abdomen beneath densely, finely granulose, rather densely, finely, irregularly punctate, and sparsely clothed at sides along anterior margin of segments with long, recumbent, white pubescence; first segment broadly, longitudinally grooved at middle; last segment broadly, deeply, arcuately emarginate at apex, with a small tooth on each side along lateral margin. Prosternum strongly gibbose, vaguely granulose, sparsely, irregularly punctate, and sparsely clothed with fine, erect, white hairs; anterior margin slightly elevated; prosternal process feebly expanded posteriorly, with the apex broadly angulated.

Female.—Differs from the male in having the last abdominal segment broadly truncate at apex, with a distinct tooth on each side at external angle, and a smaller tooth along the lateral margins.

Length, 34-38 mm; width, 14-16 mm.

Type locality.-Panama, Republic of Panama.

Type, allotype, and paratype.—U.S.N.M. No. 49551.

Remarks.—Described from three examples (one male type). The type was collected by Brother G. Regis; the male paratype, labeled "Panama, 1917", is from the Wirt Robinson collection; and the allotype was collected near San Sebastian, Guatemala, by L. Thiel.

This species resembles *cyanitarsis* Castelnau and Gory, but it differs from that species in being much larger, in having the anterior margin of the epistoma deeply, arcuately emarginate, and in having the emargination at the apex of the last abdominal segment different.

### PARATYNDARIS MEXICANA, new species

Male.—Robust, cylindrical, strongly acuminate posteriorly, uniformly black, with a vague purplish reflection in certain lights, and each elytron ornamented with a large, rounded, reddish-yellow basal spot, and with two similar spots along the lateral margin, one near the humerus and the other at the middle.

Head with the front nearly flat, and distinctly narrower at top than at bottom; surface coarsely, densely punctate, and densely clothed with long, semierect, whitish pubescence, which nearly conceals the surface; epistoma broadly, arcuately emarginate in front; antenna slender, very short, serrate from the sixth joint, and extending slightly beyond anterior margin of pronotum.

Pronotum globose, slightly wider than long, widest at middle, and the sides strongly, arcuately rounded; disk vaguely, longitudinally depressed on basal half; surface coarsely, densely granulose, and rather densely, uniformly clothed with rather long, semierect, white hairs. Scutellum very small, narrowly oblong, and nearly smooth.

Elytra as wide as pronotum at base, the sides feebly, arcuately expanded behind the humeral angles, then obliquely narrowed to the tips, which are separately subtruncate and very coarsely, irregularly dentate; lateral margins coarsely, irregularly dentate on apical halves; disk moderately convex, feebly, longitudinally striate, the striae punctate, intervals narrow, feebly convex, densely, rather coarsely, irregularly punctate, rather densely clothed with moderately long, semierect, white hairs, and each elytron with a longitudinal row of short, erect teeth near the lateral margin on apical half.

Abdomen beneath vaguely granulose, coarsely, densely punctate, and rather densely clothed with long, recumbent, white pubescence; third segment with a broadly rounded, smooth, median lobe on the posterior margin, the lobe projecting over the anterior part of the fourth segment; last segment long, and strongly acuminate at apex; pygidium densely granulose, and very coarsely, confluently punctate.

Length, 9.75 mm; width, 3.25 mm.

Type locality.—Los Mochis, Sinaloa, Mexico.

Type.—U.S.N.M. No. 49552.

Remarks.—Described from a unique male collected July 2, 1924, by R. W. Van Zwaluwenburg.

This species resembles olneyae Skinner, but it differs from that species in being more elongate, more strongly acuminate posteriorly, and by the different arrangement of the reddish-yellow spots on the elytra.

### AGRILUS RUFOBRUNNEUS, new species

Female.—Rather robust, slightly flattened above, and moderately shining; above and beneath dark brown, with a distinct reddish-cupreous tinge, and each elytron ornamented with a vague, longitudinal, whitish pubescent vitta, extending from basal depression to near the apex.

Head with the front rather wide, slightly convex, about equal in width at top and bottom, lateral margins parallel, and with a broad, longitudinal depression extending from epistoma to occiput, the depression distinctly deeper and broader on the vertex and occiput; surface coarsely, deeply, irregularly rugose, the rugae more or less concentric on the occiput, sparsely punctate between the rugae, and sparsely clothed with short, semierect, white hairs; epistoma strongly transverse between the antennae, strongly elevated, and broadly, deeply, arcuately emarginate in front; antenna short, serrate from the fifth joint, the outer joints transverse; eyes rather large, and more acutely rounded beneath than above.

Pronotum about one fourth wider than long, about equal in width at base and apex, and widest at apical fourth; sides arcuately expanded from apical angles to apical fourth, then obliquely narrowed to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae strongly sinuate, widely separated anteriorly but joined near the base; anterior margin strongly sinuate, with the median lobe strongly, broadly rounded; base strongly, angularly emarginate at middle of each elytron, with the median lobe broadly rounded, and transversely truncate in front of the scutellum; disk strongly convex, feebly, broadly, transversely flattened behind the middle, with a rather deep depression on each side extending obliquely forward to the lateral margin near middle, and with a rather strongly elevated, oblong swelling replacing the prehumeral carina near each posterior angle; surface coarsely, deeply, irregularly rugose, the rugae concentric on each side of the middle near anterior margin, finely, sparsely punctate between the rugae, and sparsely clothed with short, semierect, white hairs. Scutellum feebly, transversely carinate, the surface finely reticulate.

Elytra as wide as pronotum at base, and about equal in width at base and behind middle; sides parallel for a short distance behind base, broadly, arcuately constricted near middle, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately narrowly rounded, and finely serrulate; sides of abdomen broadly exposed above; disk feebly flattened, the sutural margins rather strongly elevated toward apices, and with broad, deep, basal depressions; surface densely, coarsely imbricate-punctate, each elytron ornamented with a broad, vague vitta along the sutural margin, extending from the basal depression to near the apex, and composed of sparsely placed, short, semierect, white hairs.

Abdomen beneath sparsely marked with more or less transverse, crenulate lines, which are coarser on basal segment, sparsely, finely punctate, sparsely, uniformly clothed with short, semierect, white hairs; first segment strongly convex at middle, the suture between the first and second segments not distinct at the sides; last segment broadly rounded at apex; vertical portions of segments not conspicuously pubescent; pygidium rounded at apex, coarsely punctate, and without a projecting carina. Prosternum coarsely, densely rugose, and rather densely clothed with rather long, semierect, white hairs; prosternal lobe broad, strongly declivous, and broadly, arcuately rounded in front; prosternal process broad, the sides parallel, and broadly truncate at apex. Tibiae slender, straight, and unarmed at apices. Posterior tarsi short, about one half as long as the tibiae, the first joint as long as the following two joints united. Anterior and middle tarsal claws cleft near the middle, the inner tooth much shorter than the outer one, and not turned inward. (Claws missing on posterior tarsi.)

Male.—Differs from the female in having the front of the head narrower, the prosternum densely clothed with long, erect, white hairs at the middle, the first and second abdominal segments feebly, longitudinally depressed and clothed with longer and more erect hairs at the middle, and the tarsal claws dissimilar; the anterior and middle ones deeply cleft, with the teeth acute at the tips and nearly equal in length, the posterior ones cleft near the middle, with the inner tooth broad, much shorter than the outer one, and not turned inward.

Length, 7-8 mm; width, 1.75-2 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49553.

Allotype.—In the H. E. Hinton collection.

Remarks.—Described from a male and a female (female type) collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *illectus* Fall, but it differs from that species in having the head more deeply depressed on the occiput, the pronotum more deeply, coarsely rugose, not longitudinally depressed at the middle, and in having the prehumeral carina replaced by an oblong swelling.

## AGRILUS HINTONI, new species

Female.—Robust and strongly flattened above; head aureo-aeneous, becoming reddish purple on occiput; pronotum and scutellum reddish purple, with a feeble bluish tinge and strongly shining; elytra

black, opaque; beneath black, rather strongly shining.

Head with the front rather wide, flat, about equal in width at top and bottom, lateral margins parallel, with a broad, shallow, longitudinal depression extending from epistoma to occiput, and with a more or less distinct, smooth, V-shaped carina on the front; surface rather densely, coarsely, irregularly punctate, becoming transversely rugose on occiput, and sparsely clothed with moderately long, recumbent, yellow hairs; epistoma scarcely transverse between the antennae, slightly elevated, and broadly, deeply, arcuately emarginate in front; antenna short, serrate from the fourth joint, the outer joints strongly serrate and about as long as wide; eyes large, equally rounded above and beneath.

Pronotum about one third wider than long, slightly narrower at apex than at base, and widest at apical fourth; sides arcuately expanded from apical angles to apical fourth, then obliquely narrowed to the posterior angles, which are rectangular; when viewed from the side the marginal carina rather strongly sinuate, the submarginal carina feebly sinuate, the two carinae narrowly separated anteriorly but joined near the base; anterior margin strongly sinuate, with the median lobe rather strongly produced and broadly rounded; base transversely truncate to the middle of each elytron, with the median lobe strongly produced and very broadly rounded; disk strongly convex anteriorly, broadly depressed on basal half, the depression extending obliquely forward on each side to the apical angle, with a rounded swelling replacing the prehumeral carina near each posterior angle, and with a small, round, deep fovea between the swelling and basal margin; surface coarsely but not very deeply, irregularly rugose, the rugae concentric on the convex area, finely, sparsely punctate between the rugae, sparsely clothed with short, inconspicuous hairs, and densely clothed in the depressions with long, recumbent, golden-yellow pubescence, which conceals the surface. Scutellum longitudinally depressed, without transverse carina, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides slightly expanded behind base, broadly, arcuately constricted in front of middle, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen only vaguely exposed above; disk rather strongly flattened, the sutural margins feebly elevated behind the middle, and with broad, moderately deep, basal depressions; surface very finely, densely imbricate-punctate, sparsely, uniformly clothed with short, inconspicuous hairs.

Abdomen beneath finely, densely granulose, sparsely, feebly punctate, with transverse, crenulate lines, which are coarser on basal segment, sparsely, uniformly clothed with short, recumbent, white hairs, and ornamented with long, recumbent, golden-vellow pubescence as follows: A rather broad vitta along the lateral margins of the first and second segments, and a large spot on each side near lateral margin on the third and fourth segments; first segment strongly convex at middle, the suture between the first and second segments not distinct at the sides; last segment broadly rounded at apex; vertical portions of segments not conspicuously pubescent; pygidium coarsely, densely punctate, longitudinally carinate, but the carina not projecting at apex. Prosternum densely, coarsely rugose, sparsely clothed with rather short, semierect, white hairs on the median part, and densely clothed at the sides with long, recumbent, golden-yellow pubescence; prosternal lobe broad, strongly declivous, rather deeply, broadly, arcuately emarginate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then arcuately narrowed to the apex, which is acutely rounded. Mesosternum and metasternum clothed at the sides with long, recumbent, golden-vellow pubescence. Tibiae slender, straight, unarmed at apices. Posterior tarsi short, about one half as long as tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broader and shorter than the outer one, and not turned inward.

Length, 9-9.5 mm; width, 2.25-2.5 mm. Type locality.—Tejupilco, Mexico, D.F. Type and paratype.—U.S.N.M. No. 49554.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from five females (one type) collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *opacipennis* Waterhouse, but it differs from that species in having the golden-yellow pubescence extending over the basal half of the pronotum, and in having a round swelling replacing the prehumeral carina.

# AGRILUS MEGERLEI, new species

Male.—Elongate, slightly flattened above, strongly shining, uniformly olivaceous-green above and beneath.

Head with the front rather narrow, slightly convex, feebly narrower at top than at bottom, lateral margins feebly, obliquely converging from bottom to top, and with a shallow, longitudinal depression extending from occiput to epistoma, the depression becoming triangular on lower half of front; surface coarsely, irregularly, but not deeply rugose, sparsely, coarsely punctate, with a small, smooth spot on each side of middle near bottom, and sparsely clothed with short, recumbent, whitish hairs; epistoma rather strongly transverse between the antennae, slightly elevated, broadly, arcuately emarginate in front, and the surface deeply depressed; antenna short, serrate from the fourth joint, the outer joints triangular, and about as long as wide; eyes large, equally rounded above and beneath.

Pronotum about one fourth wider than long, about equal in width at base and apex, and widest at apical fourth; sides nearly parallel from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal carina feebly sinuate, the submarginal carina straight, the two carinae narrowly separated anteriorly but joined behind the middle; anterior margin strongly sinuate, with the median lobe strongly produced, and broadly rounded; base transversely truncate to middle of each elytron, with the median lobe slightly produced and broadly rounded; disk moderately convex anteriorly, feebly, transversely flattened on basal half, with a deep depression on each side extending obliquely backward from the lateral margin at apical third to the flattened basal area, and with a round swelling, which is slightly carinate, near the posterior angles; surface feebly, irregularly rugose, the rugae shallow, widely separated, and more or less concentric on the convex area, sparsely, rather coarsely punctate between the rugae, and sparsely clothed with short, semierect, inconspicuous hairs. Scutellum without a transverse carina, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides slightly expanded behind base, broadly, arcuately constricted in front of middle, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen not exposed above; disk rather strongly flattened along sutural margins, with a vague, longitudinal costa on each elytron at middle, the sutural margins scarcely elevated, and with broad, deep, basal depressions; surface finely, densely imbricate-punctate, and sparsely,

uniformly clothed with short, semierect, vellowish hairs.

Abdomen beneath vaguely granulose, rather densely marked with fine, transverse, crenulate lines, which are denser on basal segments, rather densely, finely punctate, and sparsely, uniformly clothed with short, recumbent, white hairs; first segment convex at middle, the suture between the first and second segments not distinct at the sides; last segment broadly rounded at apex; vertical portions of segments not conspicuously pubescent; pygidium densely, coarsely punctate, without a projecting carina at apex. Prosternum feebly rugose, sparsely, coarsely punctate, and sparsely clothed with short, recumbent, white hairs; prosternal lobe broad, strongly declivous, and broadly, rather deeply, arcuately emarginate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender, nearly straight, the anterior and middle pairs armed with a small tooth on inner margin at apices. Posterior tarsi distinctly shorter than tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, distinctly shorter than outer one, and not turned inward.

Female.—Similar to the male but the tibiae not armed with a

tooth at apices.

Length, 4.5–7.75 mm; width, 1.2–1.8 mm. *Type locality*.—Tejupilco, Mexico, D.F.

Type and paratypes.—U.S.N.M. No. 49555. Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from eight examples (one male type) collected at the type locality at an altitude of 3,960 feet, during July 1932 by H. E. Hinton.

This species is allied to *consobrinus* Dugès, but it differs from that species in being uniformly olivaceous-green above, with the elytra uniformly pubescent, and the pronotum without a median depression. The small series of specimens examined show considerable variation in size, and in some of these examples the upper surface has a distinct golden-green tinge.

#### AGRILUS SILVICOLA, new species

Female.—Rather robust, flattened above, strongly shining; head, pronotum, and scutellum reddish cupreous; elytra black, with a feeble purplish tinge; beneath aeneous, with a distinct greenish reflection.

Head with the front rather wide, slightly convex, about equal in width at top and bottom, lateral margins parallel, and with a shallow, longitudinal depression extending from occiput to epistoma, the depression distinctly broader on the lower half of the front; surface coarsely, irregularly, but not deeply rugose, coarsely, sparsely punc-

tate, with a more or less distinct, small, smooth spot on each side of middle near bottom, and sparsely clothed with short, recumbent, white hairs; epistoma slightly transverse between the antennae, slightly elevated, broadly, feebly, arcuately emarginate in front, and the surface feebly depressed; antenna short, serrate from the fourth joint, and the outer joints transverse; eyes large, and about equally rounded above and beneath.

Pronotum about two fifths wider than long, subequal in width at base and apex, and widest at apical third; sides feebly, arcuately rounded from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal carina feebly sinuate, the submarginal carina straight, the two carinae narrowly separated anteriorly but joined behind the middle; anterior margin strongly sinuate, with the median lobe strongly produced and broadly rounded; base transversely truncate to middle of each elytron, with the median lobe slightly produced and broadly rounded; disk moderately convex anteriorly, feebly, transversely flattened on basal half, with a broad, moderately deep depression on each side extending obliquely backward from the lateral margin at apical third to the flattened basal area, and with a round swelling replacing the prehumeral carina near each posterior angle; surface feebly, irregularly rugose, the rugae shallow, widely separated, and more or less concentric on the convex area, sparsely, rather coarsely punctate between the rugae, and sparsely clothed with short, semierect, inconspicuous hairs. Scutellum without a transverse carina, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, narrower at base than at apical fourth; sides feebly expanded behind the base, broadly, arcuately constricted in front of middle, strongly, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen not exposed above; disk rather strongly flattened along sutural margins, which are scarcely elevated, with a vague, longitudinal costa on each elytron at middle, and with broad, deep, basal depressions; surface finely, densely imbricate-punctate, and sparsely, uniformly clothed with distinct, short, semierect, white hairs.

Abdomen beneath vaguely granulose, rather densely marked with fine, transverse, crenulate lines, somewhat scabrous at sides of basal segments, finely, rather densely punctate, and sparsely, uniformly clothed with short, recumbent, white hairs; first segment convex at middle, suture between first and second segments not distinct at the sides; last segment broadly rounded at apex; vertical portions of segments not conspicuously pubescent; pygidium densely, coarsely punctate, without a projecting carina at apex. Prosternum feebly rugose, sparsely, coarsely punctate, and sparsely clothed with short,

recumbent, white hairs; prosternal lobe broad, strongly declivous, and broadly, rather deeply, arcuately emarginate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender, nearly straight, unarmed at apices. Posterior tarsi about one half as long as tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, distinctly shorter than the outer one, and not turned inward.

Length, 5.25-7 mm; width, 1.3-1.75 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49556.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from three females (one type) collected at the type locality, at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species is allied to megerlei Fisher, but it differs from that species in having the head, pronotum, and scutellum reddish-cupreous or aureous, and the elytra black, with a feeble purplish tinge. The species varies considerably in size, and in the paratypes the sides of the pronotum are more obliquely narrowed posteriorly than in the type. The anterior and posterior tarsal claws are missing on the type.

#### AGRILUS RESPLENDENS, new species

Female.—Moderately elongate, robust, feebly narrowed posteriorly, strongly flattened above, rather strongly shining, uniformly greenish blue above and beneath.

Head with the front wide, rather strongly convex, distinctly wider at top than at bottom, lateral margins obliquely converging from top to bottom, and rather deeply, broadly concave, the concavity extending from occiput to epistoma; surface feebly, coarsely rugose, coarsely, densely punctate, sparsely clothed with short, erect, inconspicuous hairs; epistoma strongly transverse between the antennae, moderately elevated, broadly, rather deeply, arcuately emarginate in front, the surface deeply, triangularly depressed; antenna short, serrate from the fourth joint, the outer joints triangular and about as long as wide; eyes large, equally rounded above and beneath.

Pronotum nearly one half wider than long, subequal in width at base and apex, and widest near apical third; sides feebly, arcuately rounded anteriorly, more obliquely narrowed to the posterior angles, which are rectangular; when viewed from the side the marginal carina is arcuate, the submarginal carina strongly sinuate, the two carinae widely separated anteriorly, and connected to each other at the base; anterior margin strongly sinuate, with the median lobe

slightly produced and broadly rounded; base transversely truncate to middle of each elytron, with the median lobe strongly produced and broadly rounded; disk moderately convex, with a broad, longitudinal, median depression extending from apex to base, a broad, oblique depression on each side at lateral margin, a large, round swelling replacing the prehumeral carina near each posterior angle, and with a round, deep fovea between the swelling and basal margin; surface vaguely rugose toward the sides, rather densely, coarsely, irregularly punctate, and sparsely clothed with short, inconspicuous hairs. Scutellum depressed at middle, without a transverse carina, the surface densely, finely reticulate.

Elytra as wide as pronotum at base, slightly narrower at base than behind middle; sides slightly expanded behind base, broadly, arcuately constricted at middle, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and feebly serrulate; sides of abdomen narrowly exposed above; disk slightly flattened, the sutural margins slightly elevated posteriorly, with broad, deep, basal depressions, and two rather distinct, smooth, longitudinal costae on each elytron, the costae not extending to the base or apex; surface densely, coarsely imbricate-punctate, nearly glabrous.

Abdomen beneath vaguely granulose, rather coarsely, sparsely punctate, densely marked with transverse, crenulate lines toward the sides of basal segments, and sparsely, uniformly clothed with short, inconspicuous, white hairs; first segment convex at middle, the suture between the first and second segments distinct at the sides; last segment broadly rounded at apex; vertical portions of the segments densely clothed with long, whitish pubescence; pygidium densely, coarsely punctate, and without a projecting carina at apex. Prosternum vaguely granulose, sparsely, coarsely punctate, sparsely clothed with moderately long, semierect, white hairs, the surface deeply, narrowly, transversely depressed behind the prosternal lobe, which is broad, strongly declivous, and broadly, rather deeply, arcuately emarginate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slightly flattened, anterior pair slightly arcuate, and all pairs unarmed at apices. Posterior tarsi nearly as long as the tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth slightly broader and distinctly shorter than the outer one, and not turned inward.

Length, 10-11.5 mm; width, 3.75-4 mm.

Type locality.—Temascaltepec, Mexico, D.F.

Type.—U.S.N.M. No. 49557.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from three females (one type) collected at the type locality during 1931 by G. B. Hinton.

This species is allied to *phaenicopterus* Waterhouse, but it differs from that species in being uniformly greenish blue, while the head is without golden pubescence in front, and the prosternal lobe is rather deeply emarginate in front.

# AGRILUS PROXIMULUS, new species

Male.—Elongate, slender, rather strongly flattened above, feebly shining; head green, becoming brownish on the occiput; pronotum, elytra, and beneath uniformly black.

Head with the front rather wide, nearly flat, about equal in width at top and bottom, lateral margins nearly parallel, vaguely expanded at bottom, and vaguely, broadly, longitudinally depressed; surface densely granulose, very coarsely, deeply, confluently punctate, and nearly glabrous; epistoma narrow between the antennae, not elevated, but feebly, broadly, arcuately emarginate in front; antenna short, serrate from the fifth joint, the outer joints slightly transverse and compact; eyes large, oval, and equally rounded above and beneath.

Pronotum slightly wider than long, wider at apex than at base, and widest near apex; sides feebly, arcuately narrowed from apex to posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae sinuate, narrowly separated anteriorly but joined behind the middle; anterior margin strongly sinuate, the median lobe strongly produced and broadly rounded; base strongly, angularly emarginate at middle of each elytron, with the median lobe moderately produced and broadly rounded; disk strongly convex, feebly, transversely depressed on basal half, the depression extending on each side along the lateral margin but becoming narrower toward the apical angle, with a vague, longitudinal, median depression indicated in front and behind the middle, and with sharply defined, arcuate prehumeral carinae, extending to middle of pronotum but not connected to the marginal carinae; surface feebly, densely granulose, coarsely but not deeply rugose, the rugae widely separated and more or less transverse on the disk, finely, sparsely punctate between the rugae, and glabrous. Scutellum transversely carinate, the surface finely, densely granulose.

Elytra as wide as pronotum at base, subequal in width at base and behind middle; sides parallel for a short distance behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately narrowly rounded and rather coarsely serrate; sides of abdomen narrowly exposed above; disk feebly flattened along sutural margins, which are strongly elevated posteriorly, and with broad, deep, basal depressions; surface densely, finely imbri-

cate-punctate, sparsely clothed with short, inconspicuous, white hairs toward apices.

Abdomen beneath sparsely marked with transverse, crenulate lines, imbricate-punctate at sides of basal segment, finely, sparsely punctate on the other segments, and sparsely, uniformly clothed with short, recumbent, white hairs; first segment convex at middle, the suture between the first and second segments vaguely indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium coarsely punctate, longitudinally carinate, but the carina not projecting at apex. Prosternum sparsely, finely punctate, and rather densely clothed with long, semierect, white hairs at middle; prosternal lobe broad, strongly declivous, broadly subtruncate in front; prosternal process rather broad, the sides parallel to behind the coxal cavities, then narrowed to the apex, which is acute. Tibiae slender, the anterior and middle pairs slightly arcuate and armed with a small tooth on inner margin at apices. Posterior tarsi nearly as long as the tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, distinctly shorter than the outer one, and not turned inward.

Length, 4.3-4.5 mm; width, 1 mm.

Type locality.—Real de Arriba, Mexico, D.F.

Type.—U.S.N.M. No. 49558.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from two examples, probably both males (one type), collected at the type locality at an altitude of 6,300 feet, during July 1932, by H. E. Hinton.

This species resembles *nigripennis* Waterhouse, but it differs from that species in being uniformly black above, in having the antenna serrate from the fifth joint, and the inner tooth of the tarsal claws not turned inward and not touching the tooth on the opposite side.

#### AGRILUS TINCTIPENNIS, new species

Female.—Elongate, slender, rather strongly flattened above, rather strongly shining; head aeneo-cupreous; pronotum, elytra, and beneath black, with a vague purplish reflection in certain lights, the elytra with the humeral angles cupreous.

Head with the front broad, feebly convex, slightly wider at the top than at the bottom, lateral margins feebly, obliquely converging from top to bottom, and vaguely, longitudinally depressed; surface coarsely but not deeply, irregularly rugose, coarsely, sparsely punctate between the rugae, and sparsely clothed with short, inconspicuous hairs; epistoma transverse between the antennae, strongly elevated, broadly, rather deeply, arcuately emarginate in front; antenna rather long, serrate from the fifth joint, the outer joints

strongly triangular and about as wide as long; eyes rather small, oblong, slightly more acutely rounded beneath than above.

Pronotum subequal in length and width, wider at apex than at base, widest near middle; sides feebly, arcuately rounded anteriorly. obliquely narrowed posteriorly to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae nearly straight, rather widely separated anteriorly, and connected to each other at the base; anterior margin strongly sinuate. the median lobe strongly produced and broadly rounded; base feebly, arcuately emarginate at middle of each elytron, with the median lobe moderately produced, and broadly rounded; disk strongly convex, feebly, transversely depressed on basal half, the depression extending on each side along lateral margin, but becoming narrower toward apical angle, with a vague, broad, median depression extending from base to near anterior margin, and with vague, short, straight prehumeral carinae; surface finely, densely granulose, coarsely but not deeply rugose, the rugae widely separated, transverse on disk, and longitudinal at sides, finely, sparsely punctate between the rugae, and sparsely clothed with short, inconspicuous hairs. Scutellum transversely carinate, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, slightly narrower at base than behind middle; sides slightly expanded behind base, broadly, arcuately constricted at middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately narrowly rounded and feebly serrulate; sides of abdomen vaguely exposed above; disk slightly flattened along sutural margins, which are strongly elevated posteriorly, and with broad, deep, basal depressions; surface densely, finely imbricate-punctate, and sparsely, uniformly clothed with short, recumbent, white hairs.

Abdomen beneath feebly, sparsely marked with transverse, crenulate lines, which are coarser at sides of basal segment, finely, sparsely punctate, and sparsely clothed with short, recumbent, white hairs; first segment strongly convex at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium finely granulose, feebly, coarsely punctate, and not distinctly carinate at the middle. Prosternum densely, coarsely granulose, sparsely punctate, and sparsely clothed with short, recumbent, white hairs; prosternal lobe broad, strongly declivous, deeply emarginate in front, forming an arcuate lobe on each side; prosternal process rather wide, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender and unarmed at apices. Posterior tarsi slightly more than half as long as tibiae, the first joint as long as the following two joints united. Tarsal claws similar on all feet, cleft near the middle, the

inner tooth broad, distinctly shorter than outer one, and not turned inward.

Length, 4-4.5 mm; width, 1-1.25 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49559.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from two females (one type) collected at the type locality at an altitude of 3,960 feet, during July 1932. by H. E. Hinton.

This species is allied to *proximulus* Fisher, but it differs from that species in having the humeral angles of the elytra cupreous, the prehumeral carinae on the pronotum feebly elevated, and the prosternal lobe deeply emarginate at the middle and forming an arcuate lobe on each side. The paratype differs slightly from the type in having the pronotum more deeply, longitudinally depressed.

### AGRILUS PICEOLUS, new species

Male.—Elongate, slender, rather strongly flattened above, and rather strongly shining; head aeneo-virideous, becoming cupreous on the occiput; pronotum, elytra, and beneath black, with a vague purplish reflection in certain lights, each elytron ornamented with a vague, whitish pubescent vitta, extending along the sutural margin from basal depression to apex.

Head with the front rather narrow, feebly convex, slightly wider at top than at the bottom, lateral margins feebly, arcuately constricted on lower half, and without distinct depressions; surface coarsely, deeply, irregularly rugose, sparsely, finely punctate between the rugae, and sparsely clothed with short, recumbent, white hairs behind the epistoma; epistoma narrow between the antennae, not elevated, and deeply but not broadly, arcuately emarginate in front; antenna rather short, serrate from the fourth joint, the outer joints triangular and about as long as wide; eyes large, strongly oblong, and about equally rounded above and beneath.

Pronotum slightly wider than long, about equal in width at base and apex, and widest in front of middle; sides strongly, arcuately rounded anteriorly, more obliquely narrowed posteriorly to the posterior angles, which are rather acute; when viewed from the side the marginal and submarginal carinae strongly sinuate, narrowly separated anteriorly, and connected to each other behind the middle; anterior margin strongly sinuate, the median lobe moderately produced and broadly rounded; base strongly, arcuately emarginate at middle of each elytron, with the median lobe rather strongly produced and broadly rounded; disk moderately convex, feebly, transversely depressed on basal half, the depression extending on each side along lateral margin, but becoming narrower toward apical

angle, with a vague, median depression extending from base to near anterior margin, and with sharply defined, arcuate, prehumeral carina, the carina close to lateral margin and connected to it near the middle; surface coarsely but not deeply rugose, the rugae transverse on disk, finely, sparsely punctate between the rugae, and nearly glabrous. Scutellum strongly, transversely carinate, the surface finely, densely reticulate.

Elytra about as wide as pronotum at base, subequal in width at base and behind middle; sides slightly expanded behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately narrowly rounded and rather coarsely serrulate; sides of abdomen broadly exposed above; disk rather strongly flattened along sutural margins, which are feebly elevated posteriorly, and with broad, moderately deep, basal depressions; surface densely, finely imbricate-punctate, each elytron ornamented with a narrow vitta of sparse, short, white hairs extending along the sutural margin from basal depression to apex.

Abdomen beneath densely marked with transverse, crenulate lines, which are coarser at sides of basal segment, finely, sparsely punctate, and sparsely, uniformly clothed with short, recumbent, white hairs, which are longer and more erect on apical segment; first segment strongly convex at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium sparsely, coarsely punctate, longitudinally carinate, but the carina not projecting at apex. Prosternum feebly rugose, sparsely punctate, and sparsely clothed with moderately long, semierect, white hairs; prosternal lobe broad, strongly declivous, broadly subtruncate or vaguely emarginate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then subtruncate to the median tooth, which is acute. Tibiae slender, the anterior and middle pairs armed with a small tooth on inner margin at apices. Posterior tarsi more than one half as long as the tibiae, the first joint as long as the following two joints united. Tarsal claws similar on all feet, cleft near the middle, the teeth subequal in length, slender, acute at tips, the inner one turned inward and the tip nearly touching that of the opposite side.

Length, 5.75-6.5 mm; width, 1.3-1.5 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49560.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from two males (one type) collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *nigripennis* Waterhouse, but it differs from that species in being uniformly black above, and in having each elytron ornamented with a vague, longitudinal, white pubescent vitta.

# AGRILUS PRODIGIOSUS, new species

Female.—Elongate, slender, rather strongly flattened above, and moderately shining; head brown, with a vague cupreous tinge; pronotum aureo-cupreous; elytra violaceous-black; beneath black, with

a vague cupreous tinge.

Head with the front wide, feebly convex, about equal in width at top and bottom, lateral margins parallel, and vaguely, broadly, longitudinally depressed; surface coarsely, rather deeply, confluently rugose, the rugae transverse on occiput, rather densely, coarsely punctate between the rugae, and nearly glabrous; epistoma rather narrow between the antennae, slightly elevated, and deeply but not broadly, arcuately emarginate in front; antenna rather short, serrate from the fifth joint, the outer joints triangular and about as long as wide; eyes large, oblong, and about equally rounded above and beneath.

Pronotum subequal in length and width, equal in width at base and apex, and widest at middle; sides arcuately rounded from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae nearly straight, rather widely separated anteriorly, and connected to each other at the base; anterior margin strongly sinuate, the median lobe strongly produced, and broadly rounded; base strongly, arcuately emarginate at middle of each elytron, with the median lobe moderately produced and broadly rounded; disk strongly convex, with a rather deep, broad, median depression extending from base to near the anterior margin, and with vague, short, arcuate prehumeral carinae; surface very coarsely, deeply, transversely rugose, the rugae widely separated and more or less interrupted, finely, sparsely punctate between the rugae, and glabrous. Scutellum feebly, transversely carinate, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides slightly expanded behind base, broadly, arcuately constricted near middle, broadly, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately broadly rounded and rather coarsely serrulate; sides of abdomen narrowly exposed above; disk feebly flattened along sutural margins, which are strongly elevated near apices, and with broad, deep, basal depressions; surface rather coarsely, densely imbricate-punctate, sparsely clothed with short, recumbent, white hairs, which form a more or less distinct vitta along flattened area on each elytron and are uniformly distributed over apical third.

Abdomen beneath densely, coarsely marked with transverse, crenulate lines, rather densely, coarsely punctate, and rather densely, uniformly clothed with short, recumbent, white hairs; first segment convex at middle, the suture between the first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium sparsely, coarsely punctate, longitudinally carinate, but the carina not projecting at apex. Prosternum densely, coarsely granulose, sparsely punctate, and sparsely clothed with moderately long, semierect, white hairs; prosternal lobe broad, strongly declivous, and broadly subtruncate or vaguely emarginate in front; prosternal process rather wide, the sides feebly, obliquely narrowed to behind the coxal cavities, then strongly narrowed to the apex, which is acute. Tibiae slender and unarmed at apices. Posterior tarsi about three fourths as long as the tibiae, the first joint as long as the following two joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, shorter than outer one, and not turned inward.

Length, 5.75 mm; width, 1.25 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49561.

Remarks.—Described from a unique female collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species is allied to *chalcoderes* Chevrolat, but it differs from that species in having the pronotum strongly convex, longitudinally depressed at the middle, the surface coarsely rugose, with the rugae more or less interrupted, and with the prehumeral carinae only feebly indicated.

# AGRILUS AZTECUS, new species

Male.—Rather robust, strongly flattened above, strongly shining, uniformly cupreous above and beneath, with the head feebly aureous in front, and each elytron ornamented with three vague, yellowish-white, pubescent spots.

Head with the front broad, feebly convex, distinctly wider at top than at bottom, lateral margins strongly, obliquely converging from top to bottom, and broadly, deeply, longitudinally depressed from epistoma to occiput; surface coarsely, deeply, irregularly rugose posteriorly, coarsely, deeply, confluently punctate anteriorly, and sparsely clothed with long, recumbent, yellowish-white hairs; epistoma rather narrow between the antennae, feebly elevated, and broadly, deeply, arcuately, emarginate in front; antenna rather short, serrate from the fifth joint, the outer joints strongly triangular, and about as wide as long; eyes large, strongly oblong, and equally rounded above and beneath.

Pronotum one third wider than long, subequal in width at base and apex, and widest at apical fourth; sides slightly rounded near apical angles, then obliquely narrowed to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae feebly sinuate, narrowly separated anteriorly but joined behind the middle; anterior margin rather strongly sinuate, the median lobe feebly produced and broadly rounded; base feebly, arcuately emarginate at middle of each elytron, with the median lobe moderately produced and broadly rounded; disk moderately convex, broadly, longitudinally depressed at middle, the depression extending from base to anterior margin, and broader and deeper in front of scutellum, broadly depressed on each side along lateral margin at middle, and with rather distinct, slightly sinuate prehumeral carinae, which extend obliquely forward and are connected with the lateral margin near apical angle; surface densely, deeply, irregularly rugose, the rugae more or less transverse on disk, finely, sparsely punctate between the rugae, and sparsely clothed with short, semierect, yellowish-white hairs. Scutellum feebly, transversely carinate, the surface feebly reticulate.

Elytra about as wide as pronotum at base, and at base slightly wider than behind middle; sides slightly expanded behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and feebly serrulate; sides of abdomen broadly exposed above; disk feebly flattened along sutural margins, which are slightly elevated toward apices, and with broaddeep, basal depressions; surface finely, densely imbricate-punctate, vaguely, transversely rugose, sparsely clothed with short, semierect, yellowish-white hairs, and each elytron vaguely ornamented along sutural margin with three yellowish-white pubescent spots, one in basal depression, one at basal third, and the other at apical third.

Abdomen beneath sparsely marked with transverse, crenulate lines, which are denser and coarser at sides of basal segment, finely, sparsely punctate, and sparsely clothed with short, recumbent, white hairs on median part, and with longer, denser hairs toward sides of segment; first segment vaguely, longitudinally depressed at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments rather densely clothed with recumbent, yellowish-white pubescence; pygidium sparsely, coarsely punctate, and without a distinct longitudinal carina. Prosternum more or less transversely rugose, finely, densely punctate, and sparsely clothed with long, erect, white hairs; prosternal lobe broad, strongly declivous, broadly subtruncate or vaguely emarginate in front; pro-

sternal process broad, the sides parallel to behind the coxal cavities, then subtruncate to the median tooth, which is acute. Tibiae slender and unarmed at apices. Posterior tarsi slightly shorter than the tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the teeth slender and acute at tips, about equal in length, and the inner one turned inward.

Female.—Differs from the male in having the first abdominal segment strongly convex at middle and the prosternum without long, erect, white hairs.

Length, 7.5–9.75 mm; width, 2–2.5 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type and paratypes.—U.S.N.M. No. 49562.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from nine examples (one male type). The type and seven paratypes were collected at the type locality at an altitude of 3,960 feet, during July 1903, by H. E. Hinton, and one paratype was collected at Real de Arriba, Mexico, D.F., at an altitude of 6,300 feet, July 16, 1932, by the same collector.

This species is allied to *bicarinatus* Waterhouse, but it differs from that species in having the posterior angles of the pronotum rectangular, the prehumeral carinae connected to the lateral margins, and the pubescent spots on the elytra differently placed.

# AGRILUS VELASCO, new species

Male.—Rather robust, rather strongly flattened above, and strongly shining; head aeneo-virideous, opaque; pronotum and elytra reddish cupreous; beneath brownish cupreous, with a vague aeneous or virideous tinge.

Head with the front rather wide, flat, wider at top than at bottom, lateral margins parallel on upper half, distinctly, broadly, arcuately constricted on lower half, and broadly, longitudinally depressed on vertex and occiput; surface densely, finely granulose, feebly, coarsely, irregularly rugose, coarsely, sparsely punctate, and rather densely clothed with moderately long, semierect, white hairs; epistoma rather wide between the antennae, feebly elevated, and very broadly, deeply, arcuately emarginate in front; antenna moderately long, serrate from the fifth joint, the outer joints triangular, rather compact, and about as long as wide; eyes large, strongly oblong, and about equally rounded above and beneath.

Pronotum slightly wider than long, feebly wider at apex than at base, and widest near middle; sides parallel anteriorly, obliquely narrowed behind the middle to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae feebly sinuate, narrowly separated anteriorly, and connected

to each other near the base; anterior margin strongly sinuate, the median lobe rather strongly produced and broadly rounded; base angularly emarginate at middle of each elytron, with the median lobe moderately produced, and broadly subtruncate in front of scutellum; disk rather strongly convex, broadly depressed at the sides posteriorly, without distinct median depressions, but with sharply defined, straight prehumeral carinae, extending forward to near middle of pronotum; surface densely, finely, deeply, irregularly rugose, rather densely, finely punctate between the rugae, and sparsely, uniformly clothed with short, semierect, white hairs. Scutellum not transversely carinate, but with the surface feebly reticulate.

Elytra about as wide as pronotum at base, subequal in width at base and behind middle; sides slightly expanded behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately rather broadly rounded and coarsely serrulate; sides of abdomen rather broadly exposed above; disk feebly flattened along the sutural margins, which are rather strongly elevated behind the middle, and with broad, deep, basal depressions; surface densely, finely imbricate-punctate, and sparsely clothed with short, inconspicuous hairs.

Abdomen beneath densely, finely granulose, finely, densely marked with transverse, crenulate lines, finely, rather densely punctate, and sparsely, uniformly clothed with moderately long, recumbent, whitish hairs; first segment broadly, longitudinally depressed at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments rather densely clothed with recumbent, yellowish-white pubescence; pygidium sparsely, coarsely punctate, longitudinally carinate, but the carina not projecting at apex. Prosternum densely granulose, more or less transversely rugose, finely, sparsely punctate, and sparsely clothed with moderately long, semierect, white hairs; prosternal lobe broad, moderately declivous, and broadly, arcuately rounded in front; prosternal process broad, the sides parallel to behind the coxal cavities, then broadly subtruncate to the median tooth, which is acute. Tibiae slender, slightly arcuate, each one of the anterior and middle pairs armed with a small tooth on inner margin at apex. Posterior tarsi slightly longer than tibiae, the first joint as long as the following two joints united. Tarsal claws dissimilar, anterior and middle pairs cleft near the tip, the teeth acute and nearly equal in length; posterior pair cleft near middle, the inner tooth shorter than the outer one, and not turned inward.

Female.—Differs from the male in having front of head broader and cupreous, the tibiae unarmed at apices, the first abdominal segment strongly convex at middle, and the tarsal claws similar on all

feet, cleft near the middle, the inner tooth short, and not turned inward.

Length, 7-7.75 mm; width, 1.75-2 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type and paratypes.—U.S.N.M. No. 59563.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from 10 examples (one type) collected at the type locality at an altitude of 3,960 feet, during July 1932 by H. E. Hinton.

This species is allied to *earinifer* Waterhouse, but it differs from that species in having the pronotum convex at the middle, the elytra uniformly reddish cupreous, with the tips broadly rounded and not dilated.

# AGRILUS INFIDELIS, new species

Male.—Small, slender, moderately flattened above, strongly shining; head dark green, with a slight aeneous tinge, opaque; pronotum and elytra reddish cupreous, each elytron ornamented with a vague, whitish pubescent spot at apical third; beneath brownish cupreous, with a more or less distinct aeneous or virideous tinge.

Head with the front wide, nearly flat, equal in width at top and bottom, lateral margins parallel posteriorly, broadly, arcuately constricted on lower half, and without distinct depressions; surface densely, finely granulose, feebly, irregularly rugose, finely, sparsely punctate, clothed with a few short, recumbent, white hairs; epistoma transverse between the antennae, not elevated, but broadly, deeply, arcuately emarginate in front; antenna short, serrate from the fifth joint, the outer joints slightly transverse and compact; eyes large, oblong, slightly more acutely rounded beneath than above.

Pronotum about one third wider than long, slightly narrower at base than at apex, widest near apical angles; sides obliquely narrowed from near apical angles to posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae rather strongly sinuate, widely separated anteriorly but joined near the base; anterior margin strongly sinuate, the median lobe rather strongly produced and broadly rounded; base strongly, arcuately emarginate at middle of each elytron, with the median lobe strongly produced and broadly subtruncate in front of the scutellum; disk moderately convex, broadly depressed on each side posteriorly, without distinct median depressions, but with sharply defined, straight prehumeral carinae which extend forward to middle of pronotum; surface feebly granulose, densely but not deeply, transversely rugose, finely, sparsely punctate between the rugae, nearly glabrous. Scutellum not transversely carinate, but the surface densely, finely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides nearly parallel to behind middle (vaguely constricted in front of middle), then obliquely narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen narrowly exposed above; disk vaguely flattened along sutural margins, which are slightly elevated toward apices, and with broad, shallow, basal depressions; surface finely granulose, feebly imbricate-punctate, sparsely clothed with very short, inconspicuous hairs, each elytron ornamented with a small, vague, white pubescent spot along sutural margin at apical third.

Abdomen beneath finely, sparsely marked with transverse, crenulate lines, finely, sparsely punctate, sparsely clothed with short, recumbent, whitish hairs; first segment feebly, narrowly, longitudinally depressed at middle, the suture between first and second segments not indicated at the sides; last segment rather acutely rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium sparsely, coarsely punctate, but not distinctly longitudinally carinate. Prosternum coarsely, densely granulose, densely clothed with long, semierect, white hairs at middle; prosternal lobe broad, feebly declivous, broadly, arcuately rounded in front; prosternal process broad, the sides parallel to behind the coxal cavities, then broadly subtruncate to the median tooth, which is acute. Tibiae slender, the anterior and middle pairs armed with a minute tooth on inner margin at apices. Posterior tarsi slightly shorter than tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, shorter than outer one, and not turned inward.

Female.—Differs from the male in having the front of the head more aeneous, the tibiae unarmed at apices, the prosternum without long, semierect hairs at the middle, and the first abdominal segment convex at the middle.

Length, 4.25-5 mm; width, 2-2.25 mm.

Type locality.—Real de Arriba, Mexico, D.F.

Type and paratypes.—U.S.N.M. No. 49564.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from a large series of specimens (one male type) collected at the type locality at an altitude of 6,300 feet, during July 1932, by H. E. Hinton. This seems to be a common species and in many of the specimens examined the upper surface has a distinct bluish tinge, but this seems to be due to discoloration. In some of these examples the pubescent spots on the elytra are scarcely visible.

This species is allied to *errans* Waterhouse, but it differs from that species in being uniformly reddish cupreous, and in having the prehumeral carinae on the pronotum strongly elevated.

### AGRILUS VINCTUS, new species

Male.—Small, rather slender, rather strongly flattened, moderately shining, and uniformly dark olivaceous-green above; beneath brownish black, with a vague cupreous or aeneous tinge.

Head with the front wide, feebly convex, slightly wider at top than at bottom, lateral margins feebly, obliquely converging from top to bottom, and broadly, feebly, longitudinally depressed from epistoma to occiput; surface coarsely but not very deeply, irregularly rugose, coarsely, sparsely punctate between the rugae, nearly glabrous; epistoma slightly transverse between the antennae, not elevated, but broadly, deeply, arcuately emarginate in front; antenna long, serrate from the fifth joint, the outer joints strongly triangular and slightly longer than wide; eyes rather small, oblong, equally rounded above and beneath.

Pronotum one fourth wider than long, slightly narrower at base than at apex, widest in front of middle; sides arcuately rounded anteriorly, strongly, obliquely narrowed posteriorly to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae feebly sinuate, widely separated anteriorly but joined near the base; anterior margin strongly sinuate, the median lobe strongly produced and broadly rounded; base vaguely, arcuately emarginate at middle of each elytron, with the median lobe feebly produced and broadly rounded; disk slightly convex, feebly, broadly depressed on each side along lateral margin, with a vague, broad, longitudinal, median depression, and with feebly distinct, slightly sinuate prehumeral carinae, which extend forward to middle of pronotum; surface densely, deeply, transversely rugose, coarsely, densely punctate between the rugae, nearly glabrous. Scutellum not transversely carinate, but the surface depressed and feebly reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides parallel for a short distance behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately rather broadly rounded and feebly serrulate; sides of abdomen not exposed above; disk feebly flattened along sutural margins, which are strongly elevated, and with broad, rather shallow, basal depressions; surface densely, finely imbricate-punctate, somewhat scabrous, sparsely clothed with very short, inconspicuous hairs.

Abdomen beneath feebly, finely marked with transverse, crenulate lines, finely, sparsely punctate, sparsely clothed with short, recumbent, whitish hairs; first segment narrowly, longitudinally depressed at middle, the depression densely clothed with long, erect, white hairs, the suture between first and second segments not indicated at

the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium vaguely granulose, without a longitudinal carina. Prosternum coarsely granulose, densely clothed with long, erect, white hairs at middle; prosternal lobe narrow, strongly declivous, very broadly, deeply, arcuately emarginate in front; prosternal process rather narrow, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender, unarmed at apices. Posterior tarsi nearly as long as tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, shorter than outer one, and not turned inward.

Female.—Differs from the male in having the front of the head cupreous, the prosternum without long, erect hairs at the middle, and the first abdominal segment convex at the middle and without long, erect hairs.

Length, 5-5.75 mm; width, 1.25-1.5 mm.

Type locality.—Tejupilco, Mexico, D.F.
Type and paratypes.—U.S.N.M. No. 49565.

Paratypes.—In the H. E. Hinton collection.

Remarks.—Described from 11 examples (one male type) collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles raptor Kerremans, but it differs from that species in having the head longitudinally depressed in front, the tips of the elytra broadly rounded, and the prosternal lobe broadly and deeply emarginate in front.

### AGRILUS DAMPFI, new species

Male.—Small, slender, slightly flattened above, feebly shining; head pale green, becoming cupreous on occiput; pronotum purplish black, vaguely cupreous along lateral margins; elytra bluish black along sutural margins and on apical halves, reddish cupreous on basal halves toward lateral margins, ornamented with white pubescent designs; beneath black, with a more or less distinct aeneous and cupreous tinge on the median parts.

Head with the front wide, slightly convex, about equal in width at top and bottom, lateral margins parallel, vaguely, longitudinally depressed; surface coarsely, deeply rugose, the rugae transverse in front, rather densely, coarsely punctate, clothed with a few short, inconspicuous hairs; epistoma rather narrow between the antennae, not elevated, but rather deeply, arcuately emarginate in front; antennae short, serrate from the fifth joint, the outer joints rather compact and about as long as wide; eyes large, oblong, equally rounded above and beneath.

Pronotum slightly wider than long, wider at apex than at base, and widest in front of middle; sides are uately rounded anteriorly, obliquely narrowed posteriorly to the posterior angles, which are rectangular; when viewed from the side the marginal and submarginal carinae feebly sinuate, rather widely separated for their entire length; anterior margin strongly sinuate, with the median lobe very strongly produced and broadly rounded; base vaguely, broadly, arcuately emarginate on each side, with the median lobe slightly produced and broadly rounded; disk strongly convex anteriorly, broadly, transversely concave on basal half, the concavity extending obliquely forward on each side to the apical angle; surface feebly, coarsely, irregularly rugose, the rugae more or less transverse at the middle and oblique toward the sides, sparsely, finely punctate between the rugae, sparsely clothed toward the sides with short, white hairs. Scutellum strongly, transversely carinate, the surface densely, finely reticulate.

Elytra slightly wider than pronotum at base, and at base slightly wider than behind middle; sides arcuately rounded behind base, broadly, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then obliquely narrowed to the tips, which are separately broadly rounded or subtruncate, and finely serrulate; sides of abdomen narrowly exposed above; disk feebly flattened, without distinct longitudinal costae, the sutural margins slightly elevated posteriorly, and with broad, shallow, basal depressions; surface densely, coarsely imbricate-punctate on basal halves, more feebly punctate on apical halves, each elytron ornamented with short, recumbent, white pubescence as follows: A small spot in basal depression; a small, round, spot along sutural margin at basal third; a narrow fascia extending obliquely backward from sutural margin at middle to lateral margin behind middle; and a large, subtriangular spot covering the apical third, enclosing an oblong, glabrous spot along sutural margin.

Abdomen beneath sparsely marked with transverse, crenulate lines, which are coarser on the basal segment, sparsely, finely punctate, sparsely clothed with short, inconspicuous hairs, and with a large spot of recumbent, white pubescence on each side of third segment; first segment strongly convex at middle, the suture between first and second segments not indicated at the sides; last segment broadly subtruncate or feebly emarginate at apex; vertical portions of the segments not conspicuously pubescent, except the first, which is ornamented with a white pubescent spot; pygidium densely granulose, vaguely punctate, without a projecting carina at apex. Prosternum feebly granulose, finely, sparsely punctate, sparsely clothed with long, erect, white hairs; prosternal lobe broad, strongly declivous, broadly subtruncate or broadly, vaguely emarginate in front; pro-

sternal process moderately wide, the sides feebly narrowed to the apex, which is acute. Tibiae slender, straight, the anterior and middle pairs armed with a very small tooth on inner margin at apices. Posterior tarsi slightly shorter than tibiae, the first joint as long as the following three joints united. Tarsal claws nearly similar on all feet, cleft near the middle, the inner tooth broad, shorter than outer one, and not turned inward.

Female.—Differs from the male in having the head uniformly cupreous, the prosternum without long, erect hairs, and the tibiae

unarmed at apices.

Length, 4.5-5 mm; width, 1.1-1.25 mm. *Type locality*.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49566.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from a male and a female (male type) collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton, and a male paratype collected at Real de Arriba, Mexico, D.F., at an altitude of 6,300 feet, during 1932 by the same collector.

This species is allied to *signatus* Waterhouse, but it differs from that species in having the elytra bluish black, with the basal halves along the lateral margins reddish cupreous, and in having a different arrangement of the white pubescent markings on the elytra.

#### AGRILUS SEMIOPACUS, new species

Male.—Robust, feebly attenuate posteriorly, vaguely convex above, feebly shining, uniformly greenish or bluish black above and beneath.

Head with the front wide, nearly flat, about equal in width at top and bottom, lateral margins parallel, without distinct depressions; surface coarsely, feebly, irregularly rugose, rather densely, coarsely punctate, rather densely clothed with short, semierect, white hairs; epistoma rather narrow between the antennae, not elevated, but broadly, arcuately emarginate in front; antenna short, serrate from the fourth joint, the outer joints rather compact and about as long as wide; eyes large, equally rounded above and beneath.

Pronotum one fourth wider than long, subequal in width at base and apex, widest at middle; sides feebly, arcuately rounded from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal carina feebly sinuate, and the submarginal carina only vaguely indicated; anterior margin slightly sinuate, with the median lobe feebly produced and broadly rounded; base feebly, broadly, arcuately emarginate on each side, with the median lobe moderately produced and broadly rounded; disk strongly convex, with a broad, rather deep, oblique depression on each side along lateral margin, broadly elevated on each side near posterior angle.

but without distinct oval swellings or prehumeral carinae; surface feebly, coarsely, irregular rugose, rather densely, coarsely punctate between the rugae, sparsely, uniformly clothed with short, semierect, white hairs. Scutellum without a transverse carina, the surface

vaguely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides parallel for a short distance behind base, broadly, deeply, arcuately constricted in front of middle, broadly, arcuately expanded behind middle, then arcuately narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen not exposed above; disk slightly convex, without median costae, the sutural margins feebly elevated posteriorly, and with broad, moderately deep, basal depressions; surface densely, finely imbricate-punctate, sparsely, uniformly clothed with short, semierect, inconspicuous hairs.

Abdomen beneath densely marked with distinct, transverse, crenulate lines, imbricate toward the sides of basal segment, finely rather densely punctate, and rather densely, uniformly clothed with short, recumbent, whitish hairs; first segment convex at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium densely, coarsely punctate, strongly carinate, but the carina not projecting at apex. Prosternum more or less rugose, coarsely, rather densely punctate, sparsely clothed with short, semierect, white hairs; prosternal lobe broad, strongly declivous, broadly, transversely subtruncate in front, prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender. the anterior and middle pairs slightly arcuate and armed with a very small tooth on inner margin at apices. Posterior tarsi slightly shorter than tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, distinctly shorter than outer one, and not turned inward.

Length, 8.5 mm; width, 2.5 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49567.

Remarks.—Described from a unique male collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *muticus* LeConte, but it differs from that species in having the antenna serrate from the fourth joint, the pronotum strongly elevated near the posterior angles, and the elytra without longitudinal costae.

#### AGRILUS TEJUPILCOENSIS, new species

Female,—Rather robust, strongly flattened above, feebly shining; above and beneath reddish cupreous, with a vague aeneous reflection, the elytra ornamented with yellowish-white pubescent spots.

Head with the front rather wide, nearly flat, slightly wider at top than at bottom, lateral margins feebly converging from top to bottom, and with a broad depression extending to the lateral margins; surface finely, densely granulose, vaguely rugose, sparsely, coarsely punctate, and sparsely clothed with short, inconspicuous hairs; epistoma slightly transverse between the antennae, subtriangular, strongly elevated, broadly, rather deeply, arcuately emarginate in front, the surface depressed; antenna short, serrate from the fourth joint, the outer joints strongly triangular and about as long as wide; eyes large, equally rounded above and beneath.

Pronotum one third wider than long, about equal in width at base and apex, widest at middle; sides feebly, arcuately rounded from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal carina moderately sinuate, the submarginal carina nearly straight, the two carinae widely separated anteriorly but joined behind the middle; anterior margin nearly transversely truncate, without a median lobe; base rather deeply, angularly emarginate at middle of each elytron, with the median lobe strongly produced, broadly rounded, and subtruncate in front of scutellum; disk moderately convex, with a broad, rather deep, median depression extending from anterior margin to base, a broad depression on each side along lateral margin, but without prehumeral carinae or round swellings near the posterior angles; surface vaguely granulose, coarsely but not deeply, more or less transversely rugose, sparsely, finely punctate between the rugae, rather densely clothed in the median and lateral depressions with moderately long, recumbent, yellowish-white pubescence. Scutellum strongly, transversely carinate, the surface finely, densely reticulate.

Elytra slightly wider than pronotum at base, subequal in width at base and behind middle; sides nearly parallel to behind middle (vaguely constricted in front of middle), then obliquely narrowed to the tips, which are separately narrowly rounded and finely serrulate; sides of abdomen broadly exposed above; disk rather strongly flattened along sutural margins, which are slightly elevated posteriorly, with broad, deep, basal depressions, and a vague, obtuse, longitudinal costa at middle of each elytron; surface coarsely, densely, imbricate-punctate, each elytron ornamented with short, recumbent, vellowish-white pubescence as follows: A small spot in basal depression; a small, round spot near middle at basal third; a small, round spot at middle near lateral margin; an elongate spot at apical third

near sutural margin; behind this spot a narrow vitta extending along sutural margin to apex; and a minute spot on middle of elytron at

apical fourth.

Abdomen beneath vaguely granulose, sparsely marked with transverse, crenulate lines, which are coarser on basal segment, sparsely, finely punctate, sparsely, uniformly clothed with short, recumbent, white hairs, and the third and fourth segments ornamented on each side with a spot of dense, yellowish-white pubescence; first segment strongly convex at middle, the suture between first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments densely clothed with recumbent, yellowish-white pubescence, except the second, which is glabrous; pygidium densely granulose, sparsely, coarsely punctate, without a projecting carina at apex. Prosternum rather coarsely, sparsely punctate, sparsely clothed with moderately long, semierect, white hairs; prosternal lobe broad, slightly declivous, broadly, arcuately rounded in front; prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute and bent downward. Mesosternum, metasternum, and posterior coxae densely clothed at the sides with long, recumbent, yellowish-white pubescence. Tibiae slender, unarmed at apices, the anterior pair feebly arcuate. Posterior tarsi slightly shorter than tibiae; the first joint slightly longer than the following two joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, distinctly shorter than outer one, and not turned inward.

Length, 8.5 mm; width, 2.1 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49568.

Remarks.—Described from a unique female collected at the type locality at an altitude of 3.960 feet, during July 1932, by H. E. Hinton.

This species is more or less closely allied to albofasciatus Waterhouse, but it differs from that species in having the head broadly depressed in front, the pronotum more broadly depressed at middle, the elytra uniformly dull reddish-cupreous, and each elytron ornamented with a narrow, yellowish-white, pubescent vitta along the sutural margin at apical fourth.

#### AGRILUS MONTEZUMA, new species

Male.—Elongate, slender, rather strongly flattened above, rather strongly shining; head aeneo-virideous, becoming reddish cupreous on occiput; pronotum reddish cupreous; elytra black, with a vague purplish tinge; beneath cupreous, with a more or less distinct aeneous or reddish reflection in certain lights.

Head with the front narrow, nearly flat, about equal in width at top and bottom, lateral margins parallel, vaguely, longitudinally depressed; surface coarsely, deeply, irregularly rugose, coarsely punctate between the rugae, sparsely clothed with short, recumbent, white hairs; epistoma narrow between the antennae, not elevated, but broadly, arcuately emarginate in front; antenna moderately long, serrate from the fifth joint, the outer joints triangular and about as long as wide; eyes large, oval, equally rounded above and beneath.

Pronotum slightly wider than long, subequal in width at base and apex, widest at middle; sides rather strongly, arcuately rounded from apical angles to posterior angles, which are rectangular; when viewed from the side the marginal carina nearly straight, the submarginal carina feebly sinuate, and the two carinae narrowly separated for their entire length; anterior margin strongly sinuate, the median lobe very strongly produced and broadly rounded; base broadly, angularly emarginate at middle of each elytron, with the median lobe strongly produced and broadly rounded; disk moderately convex anteriorly, feebly, transversely flattened on basal half, the flattened area extending obliquely forward on each side to the lateral margin at apical third, without prehumeral carinae or round swellings near posterior angles; surface coarsely, deeply, more or less transversely rugose, finely, sparsely punctate between the rugae, nearly glabrous. Scutellum feebly, transversely carinate the surface densely, finely reticulate.

Elytra slightly wider than pronotum at base, slightly narrower at base than behind middle; sides parallel for a short distance behind base, feebly, broadly, arcuately constricted in front of middle, arcuately expanded behind middle, then obliquely narrowed to near the tips, where they are vaguely expanded, the tips separately broadly rounded and rather coarsely serrulate; sides of abdomen not exposed above; disk feebly flattened along sutural margins, which are slightly elevated posteriorly, with broad, moderately deep, basal depressions, and a vague, obtuse, longitudinal costa at middle of each elytron; surface densely, coarsely imbricate-punctate, sparsely, uniformly

clothed with short, semierect, inconspicuous, white hairs.

Abdomen beneath feebly granulose, densely marked with transverse, crenulate lines, which are coarser on basal segment, finely, rather densely punctate, and rather densely, uniformly clothed with short, recumbent, whitish hairs; first segment strongly convex at middle, the suture between the first and second segments not indicated at the sides; last segment broadly rounded at apex; vertical portions of the segments not conspicuously pubescent; pygidium coarsely, densely punctate, without a projecting carina at apex. Prosternum rather coarsely, sparsely punctate, sparsely clothed with long, erect, white hairs; prosternal lobe broad, strongly declivous,

broadly, transversely truncate in front; prosternal process broad, the sides parallel to behind the coxal cavities, then obliquely narrowed to the apex, which is acute. Tibiae slender, the anterior and middle pairs slightly arcuate and armed with a very small tooth on inner margin at apices. Posterior tarsi about one half as long as the tibiae, the first joint as long as the following three joints united. Tarsal claws similar on all feet, cleft near the middle, the inner tooth broad, shorter than outer one, and not turned inward.

Length, 7.25 mm; width, 1.6 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49569.

Remarks.—Described from a single male collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *ruficollis* Fabricius, but it differs from that species in being slenderer, in having the head nearly convex in front, the antennae serrate from the fifth joint, the pronotum with the surface coarsely, transversely rugose, and the anterior margin strongly produced at middle, and in each elytron having an obtuse. longitudinal, median costa.

## TAPHROCERUS SHANNONI, new species

Elongate, more strongly attenuate posteriorly, feebly flattened above, glabrous; above and beneath uniformly black, with a vague aeneous reflection in certain lights.

Head slightly narrower than pronotum at base, strongly convex from top to bottom, nearly flat transversely, the front slightly wider at top than at bottom, lateral margins feebly converging from top to bottom, with a shallow, triangular depression behind the epistoma, and a vague, narrow, longitudinal groove extending from the depression to the occiput; surface finely, densely reticulate, sparsely, finely, irregularly punctate, clothed with a few short, inconspicuous hairs.

Pronotum moderately convex, twice as wide as long, subequal in width at base and apex, widest at basal third; sides when viewed from above obliquely expanded from apical angles to basal third, then obliquely narrowed to the posterior angles, which are obtusely angulated; anterior margin transversely truncate; base transversely truncate to middle of each elytron, with the median lobe moderately produced and arcuately emarginate in front of scutellum; disk feebly, narrowly, transversely depressed along anterior margin, broadly depressed along lateral margins, the depression extending obliquely backward on each side to the base, with a rounded elevation near the posterior angles; surface densely, finely reticulate.

sparsely, irregularly ocellate-punctate. Scutellum small, triangular, arcuately rounded in front, the surface feebly reticulate.

Elytra moderately convex above, slightly wider than pronotum at base, subequal in width at base and near middle; humeral angles obtuse; sides obliquely expanded from base to basal sixth, arcuately constricted at basal third, arcuately rounded at middle, then obliquely narrowed to the tips, which are separately rather broadly rounded, and irregularly serrulate; humeri moderately developed; disk with broad, transverse basal depressions, each elytron with a distinct, short, straight carina extending from humerus to basal third; surface feebly, coarsely, irregularly punctate, the punctures very shallow, and becoming obsolete toward apices.

Abdomen beneath feebly, rather coarsely reticulate, very sparsely, feebly, irregularly ocellate-punctate, the punctures very shallow, elongate, open posteriorly, with a short, inconspicuous hair at the middle of each puncture; last segment broadly rounded at apex, with the apical groove deep, and following the outline of the apical half

of the segment. Prosternum densely, finely reticulate.

Length, 3 mm; width, 1 mm.

Type locality.—Sabanas, Panama.

Type and paratypes.—U.S.N.M. No. 49570.

Remarks.—Described from eight examples (one type). The type and two paratypes were collected at the type locality, April 20, 1923, by R. C. Shannon; one paratype was collected on Taboga Island, Panama, February 26, 1912, by A. Busck; one paratype at Porto Bello, Panama, February 15, 1911, by E. A. Schwarz; one paratype at Limon, Canal Zone, June 10, 1919, by H. F. Dietz and J. Zetek; one paratype on Flat Rock Plantation, Chagres River, Panama, August 24, 1918, by H. F. Dietz and J. Zetek; and one paratype on Taboga Island, Panama, September 21–22, 1918, by the same collectors. Sexes not determined.

In Dr. J. Obenberger's revision of the genus *Taphrocerus*, this species runs down to *rusticus* Thomson in his table of species, but it differs from that species in being glabrous and in having the elytra broadly rounded at the apices.

#### TAPHROCERUS DIETZI, new species

Elongate, slightly more attenuate posteriorly, feebly flattened above, and nearly glabrous; above and beneath aeneous, with a feeble cupreous tinge.

Head slightly narrower than pronotum at base, strongly convex from top to bottom, nearly flat transversely, the front slightly wider at top than at bottom, lateral margins feebly converging from top

<sup>&</sup>lt;sup>1</sup> Sbornik, vol. 2, p. 52, 1924.

to bottom, broadly, transversely flattened behind the epistoma, with a shallow, narrowly triangular depression on the front, and a vague, narrow, longitudinal groove extending from depression to occiput; surface densely, finely reticulate, transversely rugose behind the epistoma, sparsely, finely, irregularly punctate, and sparsely clothed with recumbent, white hairs, which are longer and denser on the flattened area behind the epistoma.

Pronotum moderately convex, twice as wide as long, slightly narrower at apex than at base, and widest at basal third; sides when viewed from above obliquely expanded from apical angles to basal third, then strongly arcuately narrowed to the posterior angles which are rectangular; anterior margin transversely truncate; base transversely truncate to middle of each elytron, with the median lobe moderately produced, and feebly, arcuately emarginate in front of scutellum; disk rather deeply, narrowly, transversely depressed along anterior margin, broadly, deeply depressed anteriorly along lateral margins, broadly, deeply depressed on basal half, the depression more shallow in front of scutellum; surface densely, finely reticulate, with a few scattered ocellate-punctures in the depressions, and clothed with a few short, inconspicuous hairs. Scutellum small, triangular, arcuately rounded in front, the surface obsoletely reticulate.

Elytra moderately convex, slightly wider than pronotum at base, subequal in width at base and behind middle; humeral angles obtuse; sides arcuately expanded behind base, strongly, arcuately constricted at basal fourth, arcuately rounded at middle, then obliquely narrowed to the tips, which are conjointly broadly rounded, and coarsely, irregularly serrulate; humeri smooth, rather strongly developed; disk with broad, deep, transverse, basal depressions, but without longitudinal carinae; surface coarsely, irregularly punctate, the punctures forming more or less distinct rows on basal halves, but becoming obsolete toward apices.

Abdomen beneath feebly, rather coarsely reticulate, sparsely, irregularly occllate-punctate, the punctures very shallow, elongate, open posteriorly, and each provided with a very short white hair arising from its center; last segment broadly rounded at apex, with the apical groove deep and following the outline of the apical half of the segment. Prosternum finely, densely reticulate.

Length, 3.25 mm; width, 1.13 mm.

Type locality.—Coban, Alta Vera Paz, Guatemala.

*Type.*—U.S.N.M. No. 49571.

Remarks.—Described from a single example (sex not determined) collected at the type locality in May 1926 by Dr. J. M. Aldrich. The type has a distinct bluish or purplish color on the elytra, but this is probably due to discoloration.

This species is allied to *finitimus* Obenberger, but it differs from that species in having the head distinctly depressed in front, the pronotum widest at the basal third, with the sides strongly, arcuately narrowed near the posterior angles, where the surface is deeply depressed.

# BRACHYS HINTONI, new species

Male.—Broadly cuneiform, twice as long as wide, broadly rounded in front, more acuminate posteriorly, moderately shining, and sparsely pubescent, the pubescence pale yellow and forming more or less distinct designs on the elytra; above dark brown, with a more or less distinct aeneous and cupreous reflection in certain lights; beneath piceous, with a distinct aeneous tinge.

Head strongly flattened and vaguely depressed in front, without gibbosities on the vertex, but with a narrow, longitudinal groove on the front, the groove becoming obsolete on the occiput and behind the epistoma; surface vaguely granulose, finely, sparsely, irregularly punctate, and sparsely, irregularly clothed with long, recumbent, golden-yellow hairs; epistoma transverse between the antennal cavities, feebly elevated, but not transversely carinate in front;

Pronotum moderately convex, nearly two and one half times as wide as long at middle, distinctly narrower at apex than at base, and widest at base; sides obliquely narrowed from base to apical angles: when viewed from the side the lateral margin nearly straight anteriorly, arcuately sinuate near the posterior angle for the reception of the anterior leg; anterior margin transversely truncate; base transversely truncate to middle of each elytron, where it is feebly, arcuately emarginate, then turning obliquely backward to the scutellum, in front of which it is feebly, arcuately emarginate; posterior angles narrowly rounded; disk feebly, narrowly, transversely depressed behind anterior margin, broadly, transversely concave on basal half, the concavity extending obliquely forward to the apical angles, causing the antero-median part of the disk to be regularly convex, but without a distinct carina near posterior angles; surface densely, obsoletely reticulate, coarsely, densely ocellate-punctate in the depressions, sparsely, irregularly clothed with long, recumbent, yellowish hairs. Scutellum triangular, feebly wider than long, the anterior margin feebly rounded, the surface vaguely reticulate.

Elytra as wide as pronotum at base; humeral angles subrectangular; sides nearly parallel to middle (feebly, arcuately constricted at basal fourth), then obliquely narrowed to the tips, which are separately narrowly rounded, with the lateral margins entire; disk with distinct lateral carinae, which are sinuate, strongly elevated, and extend from humeral angles to near the apices, a broad depression on each side behind the humeral angle, and with broad, moderately

deep, basal depressions; surface finely, densely, irregularly punctate, with numerous irregular, smooth areas, and each elytron ornamented with long, recumbent, yellowish-white pubescence as follows: A few scattered hairs on basal third; a broad, more or less distinct, irregular, transverse fascia at middle; and a similar fascia covering the apical fourth.

Abdomen beneath densely, obsoletely reticulate, sparsely, feebly, ocellate-punctate, the punctures oblong, open posteriorly, a short, recumbent, white hair arising from each puncture; last segment broadly, obtusely rounded at apex, with the margin entire, and the apical groove deep, transversely truncate posteriorly, and following the outline of the lateral margin on each side.

Length, 3.5 mm; width, 1.7 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 49572.

Remarks.—Described from a unique male collected at the type locality at an altitude of 3,900 feet, during July 1932, by H. E. Hinton.

This species resembles nevermanni Fisher, but it differs from that species in having the epistoma transverse between the antennal cavities, the pronotum subequal in width to the elytra and without distinct prehumeral carinae, and the pubescence on the elytra uniformly yellowish white.

# BRACHYS LINEIFRONS, new species

Female.—Broadly cuneiform, twice as long as wide, broadly rounded in front, slightly narrower behind than in front, moderately shining, the elytra ornamented with silvery white pubescent spots; above dark brown, with more or less distinct purplish, aeneous, and greenish reflections in certain lights; beneath piceous, with a feeble aeneous reflection.

Head feebly convex, broadly, longitudinally depressed, without gibbosities on the vertex, but with a narrow, longitudinal groove extending from occiput to near the epistoma; surface feebly, finely reticulate, sparsely punctate, and very sparsely, irregularly clothed with long, semierect, whitish and yellowish hairs; epistoma rather narrow between the antennal cavities, the sides feebly elevated, but not transversely carinate in front.

Pronotum moderately convex, slightly more than twice as wide as long at middle, distinctly narrower at apex than at base, widest at base; sides obliquely narrowed from base to apical angles; when viewed from the side the lateral margin slightly sinuate anteriorly, and more strongly arcuate near the posterior angle for the reception of the anterior leg; anterior margin transversely truncate;

base transversely truncate to middle of each elytron, where it is feebly, arcuately emarginate, then turning obliquely backward to the scutellum, in front of which it is feebly, arcuately emarginate; posterior angles nearly rectangular; disk broadly, transversely concave on basal half, the concavity extending obliquely forward on each side to the apical angle, causing the antero-median part of the disk to be regularly convex, and with a distinct, short carina on each side near the posterior angle; surface densely, finely reticulate, finely, sparsely punctate on convex area, coarsely ocellate-punctate in the depressions, and sparsely, irregularly clothed with rather long, semierect, white and yellow hairs intermixed, the white hairs predominating at the sides. Scutellum triangular, slightly wider than long, with the anterior margin feebly rounded and the surface densely, obsoletely reticulate.

Elytra slightly narrower than pronotum at base; humeral angles rectangular; sides nearly parallel or feebly sinuate to middle, then obliquely narrowed to the tips, which are separately narrowly rounded, with the lateral margins entire; disk with distinct lateral carinae, which are sinuate, strongly elevated, and extending from humeral angles to near the apices, and with broad, moderately deep, basal depressions; surface more or less alutaceous, sparsely, finely, irregularly punctate on basal halves, but the punctures becoming obsolete posteriorly, and each elytron ornamented with pubescent designs as follows: A single longitudinal row of brownish-vellow hairs extending from basal lobe to near middle; numerous irregularly distributed, semierect, brownish-yellow hairs on basal half; a broad, irregular fascia of inconspicious, black hairs behind middle; a sparse uniform clothing of short, semierect, brownish-yellow hairs on apical fourth; a broad fascia of irregularly distributed, widely separated, white pubescent spots at middle; a similar fascia at apical fourth; and an inconspicuous, white, pubescent spot at apex.

Abdomen beneath densely, obsoletely reticulate, sparsely ocellatepunctate, the punctures large, oblong, and open posteriorly, and sparsely clothed with short, recumbent, white hairs toward the sides and on last segment, which is broadly rounded at apex, with the margin finely crenulate, and the apical groove deep, transversely truncate posteriorly, and following the outline of the lateral margin on each side.

Length, 2.6 mm; width, 1.25 mm.

Type locality.—La Ceiba, Honduras.

Type.—U.S.N.M. No. 49573.

Remarks.—Described from a unique female collected at the type locality, August 22, 1916, by F. J. Dyer.

This species resembles *ornatus* Fisher, but it differs from that species in being more acuminate posteriorly and in having the white pubescent spots on the elytra more distinct.

## BRACHYS ZETEKI, new species

Male.—Broadly cuneiform, twice as long as wide, broadly rounded in front, slightly narrower behind than in front, strongly shining, the elytra ornamented with distinct, transverse, whitish pubescent fasciae; head aureo-aeneous in front; pronotum and elytra dark green, with a more or less distinct bluish or purplish reflection in certain lights; beneath black, strongly shining.

Head slightly convex, transversely flattened behind the epistoma, with two broad, feeble gibbosities and a narrow, longitudinal groove on the front, the groove becoming obsolete on the occiput and behind the epistoma; surface finely, densely reticulate, sparsely, finely, irregularly punctate on vertex and occiput, more densely punctate behind the epistoma, sparsely, irregularly clothed with short, semierect, yellowish hairs on occiput and vertex, densely clothed with moderately long, erect, yellow hairs behind the epistoma, and with a round glabrous area on each side of the front; epistoma feebly transverse between the antennal cavities, strongly elevated, but not transversely carinate.

Pronotum moderately convex, two and one half times as wide as long at middle, distinctly narrower at apex than at base, and widest at base; sides arcuately narrowed from base to apical angles; when viewed from the side the lateral margin nearly straight anteriorly, strongly arcuate near the posterior angle for the reception of the anterior leg; anterior margin transversely truncate; base transversely truncate to middle of each elytron, where it is feebly, arcuately emarginate, then turning obliquely backward to the scutellum, in front of which it is feebly, arcuately emarginate; posterior angles obtusely rounded; disk broadly, transversely concave on basal half, the concavity extending obliquely forward on each side to the apical angle, causing the antero-median part of the disk to be regularly convex, and with a feeble, obtusely rounded, arcuate carina on each side near the posterior angle; surface densely, finely reticulate, sparsely, finely punctate on convex area, coarsely ocellate-punctate in depressions, and sparsely, irregularly clothed with moderately long, semierect, white hairs. Scutellum triangular, slightly wider than long, with the anterior margin feebly rounded, and the surface densely, obsoletely reticulate.

Elytra slightly narrower than pronotum at base; humeral angles obtusely rounded; sides strongly sinuate to middle, then obliquely narrowed to the tips, which are separately narrowly rounded, with

the lateral margins entire; disk with distinct lateral carinae, which are sinuate, strongly elevated, and extending from humeral angles to near the apices, a broad depression on each side behind the humeral angle, and with broad, moderately deep, basal depressions; surface feebly rugose, sparsely, finely, irregularly punctate, rather densely, irregularly clothed with moderately long, semierect, white hairs, and with a broad, transversely oblique fascia of inconspicuous, black hairs just behind the middle.

Abdomen beneath densely, obsoletely reticulate, sparsely, feebly ocellate-punctate, the punctures large, oblong, and open posteriorly, sparsely clothed with short, recumbent, white hairs toward the sides and on last segment, which is broadly rounded at apex, with the margin entire, and the apical groove deep, transversely truncate posteriorly, and following the outline of the lateral margin on each side.

Length, 2.75 mm; width, 1.3 mm.

Type locality.—Taboga Island, Panama.

Type and paratype.—U.S.N.M. No. 49574.

Remarks.—Described from two males (one type) collected at the type locality, June 19, 1919, by H. F. Dietz and J. Zetek.

This species is allied to *laetus* Waterhouse, but it differs from that species in having the epistoma transverse between the antennal cavities, and in having the elytra rather densely, irregularly clothed with white hairs, with a broad, transversely oblique, black pubescent fascia just behind the middle.

#### PACHYSCHELUS VALERIO, new species

Female.—Broadly cuneiform, one and one half times as long as wide, more strongly narrowed behind than in front, strongly shining, glabrous; head, pronotum, scutellum, and beneath piceous, with a feeble aeneous reflection; elytra blue, with a vague violaceous tinge.

Head strongly convex, without a distinct longitudinal groove on the front; surface finely, densely granulose, with a few coarse, irregularly distributed punctures intermixed, and nearly glabrous.

Pronotum slightly convex, four times as wide as long at middle, much narrower at apex than at base, and widest at base; sides strongly, arcuately narrowed from base to apical angles, which are acute; posterior angles acute, projecting slightly beyond the humeral angles of the clytra and fitting closely to them; anterior margin deeply, arcuately emarginate; base transversely sinuate, broadly, vaguely, arcuately emarginate in front of scutellum; surface even, feebly depressed toward the sides, smooth, sparsely, feebly, irregularly occilate-punctate. Scutellum large, broadly triangular, the surface smooth.

Elytra as wide as pronotum at base, widest at basal fourth; humeral angles broadly rounded; sides nearly parallel or vaguely rounded from base to near middle, then strongly, arcuately narrowed to the tips, which are conjointly broadly rounded, the lateral margin vaguely serrate, and when viewed from the side nearly straight from base to apex, except for a broad, arcuate sinuation for the reception of the posterior leg; each elytron with a broad, deep depression along the lateral margin behind the humerus, and with a broad, vague, basal depression; surface more or less rugose, coarsely, rather densely, irregularly punctate, the punctures becoming obsolete toward the apices.

Abdomen beneath feebly convex, vaguely granulose; last segment transversely concave, the apical margin deeply, broadly, areuately emarginate at the middle, with three or four short teeth arranged in a semicircle on each side of the emargination. Metasternum very broadly emarginate in front. Prosternum feebly, broadly, arcuately emarginate in front; prosternal process very broad, broadly rounded at apex. Prothoracie epipleura broad and nearly flat. Antennal groove deep, parallel with the lateral margin.

Length, 2.75 mm; width, 1.5 mm.

Type locality.—San Jose, Costa Rica.

Type.—U.S.N.M. No. 49575.

Remarks.—Described from a unique female collected at the type locality at an altitude of 1,160 meters by M. Valerio.

This species is closely allied to *infidelis* Obenberger, but it differs from that species in being glabrous, in having the elytra blue and distinctly punctured, and in the different arrangement of the teeth on the apical margin of the last abdominal segment.

# LIUS HINTONI, new species

Male.—Elongate, broadly cuneiform, moderately convex, strongly shining; head and pronotum cupreous, the former slightly aeneous in front; elytra purplish, with a slight bluish-black reflection in certain lights; beneath brown, with a distinct aeneous tinge.

Head with the front as wide as the transverse diameter of the eye, slightly wider at top than at bottom, lateral margins feebly converging from top to bottom, deeply, longitudinally depressed, the depression extending to the lateral margins, but becoming obsolete on the occiput, and with a narrow, longitudinal groove extending from epistoma to vertex; surface glabrous, densely, finely reticulate, sparsely, rather coarsely, irregularly punctate; eyes moderately convex; frontal pores large, median, and contiguous; epistoma very narrow between the antennal cavities, strongly, angularly elevated, the antennae nearly contiguous.

Pronotum moderately convex, two and one half times as wide as long at base; distinctly narrower at apex than at base, and widest at base; when viewed from above the sides arcuately expanded at base, then arcuately narrowed to the apical angles; posterior angles rather acutely rounded and feebly projecting; anterior margin feebly, broadly, arcuately emarginate; base feebly, transversely sinuate to middle of each elytron, then turning obliquely backward to the scutellum, in front of which it is vaguely, arcuately emarginate; surface feebly, broadly flattened toward the sides, glabrous, densely, finely reticulate at the sides, smoother on median part, and sparsely, coarsely, irregularly punctate. Scutellum large, triangular, anterior margin vaguely rounded, the surface nearly smooth.

Elytra moderately convex, uneven, as wide as pronotum at base; humeral angles obtusely angulated; sides nearly parallel to basal third, then strongly, arcuately narrowed to the tips, which are conjointly broadly rounded, with the lateral margins vaguely serrate; humeri prominent; surface glabrous, sparsely, finely, irregularly punctate on apical halves, with numerous small, irregularly arranged, depressed areas on basal halves, the depressions finely reticulate, each elytron with a large, rounded elevation behind the scutellum, a similar one along the lateral margin at middle, and an elongate elevation at apex.

Abdomen beneath finely, densely reticulate, sparsely, rather coarsely, irregularly punctate, and sparsely clothed with short, recumbent, white hairs; last segment broadly rounded at apex, with the apical groove deep and following the outline of the lateral margins. Prosternum finely, densely reticulate, the anterior margin subtruncate or vaguely rounded; prosternal process narrow, sparsely punctate, the sides feebly, broadly constricted at the coxal cavities, broadly rounded at apex.

Length, 2.75 mm; width, 1.35 mm.

Type locality.—Real de Arriba, Mexico, D.F. Type.—U.S.N.M. No. 49576.

Paratype.—In the H. E. Hinton collection.

Remarks.—Described from two males (one type) collected at the type locality at an altitude of 6,300 feet, during July 1932, by H. E. Hinton.

This species resembles splendens Fisher, but it differs from that species in having the front of the head more deeply depressed and the elytra very uneven.

#### LIUS SPLENDENS, new species

Male.—Elongate, broadly cuneiform, moderately convex, strongly shining; head and pronotum cupreous, the former feebly aeneous in front; elytra purplish; beneath dark brown, with a distinct aeneous tinge.

Head with the front slightly narrower than the transverse diameter of the eye, slightly wider at top than at bottom, the lateral margins feebly converging from top to bottom, moderately, longitudinally depressed, the depression extending to the lateral margins, but becoming obsolete on the occiput, and with a narrow, longitudinal groove extending from epistoma to vertex; surface glabrous, feebly, densely reticulate, very sparsely, coarsely, irregularly punctate; eyes moderately convex; frontal pores large, narrowly separated; epistoma very narrow between the antennal cavities, strongly elevated, the antennae nearly contiguous.

Pronotum moderately convex, two and one half times as wide as long at base, distinctly narrower at apex than at base, widest at base; when viewed from above, the sides obliquely narrowed from base to apical angles; posterior angles rectangular, not projecting; anterior margin broadly, arcuately emarginate; base feebly, transversely sinuate to middle of each elytron, then turning obliquely backward to the scutellum, in front of which it is vaguely, arcuately emarginate; surface uniformly convex, glabrous, vaguely reticulate, sparsely, coarsely, irregularly punctate. Scutellum large, triangular, the anterior margin vaguely rounded, the surface smooth.

Elytra moderately convex, as wide as pronotum at base; humeral angles obtuse; sides arcuately narrowed from the humeral angles to the tips, which are conjointly broadly rounded, the lateral margins vaguely serrate; humeri rather prominent; surface glabrous, slightly rugose at the sides, rather densely, coarsely, irregularly punctate, the punctures coarser, more or less arranged in longitudinal rows on the basal halves toward sutural margins.

Abdomen beneath finely, densely reticulate, sparsely, finely, irregularly punctate, very sparsely clothed with short, recumbent, white hairs; last segment broadly rounded at apex, with the apical groove deep and following the outline of the lateral margins. Prosternum feebly reticulate, the anterior margin subtruncate or vaguely rounded; prosternal process moderately wide, sparsely, coarsely punctate, clothed with a few white hairs, the sides nearly parallel (vaguely constructed at coxal cavities), broadly rounded at apex.

Length, 2.5 mm; width, 1.25 mm.

Type locality.—Tegucigalpa, Honduras. Type and paratype.—U.S.N.M. No. 49577.

Remarks.—Described from two males (one type) collected at the type locality, June 25, 1918, by F. J. Dyer.

This species is allied to *variabilis* Waterhouse, but it differs from

that species in coloration and in having the front of the head nar-

rower, the epistoma very narrow between the antennal cavities, and the antennae nearly contiguous at their bases.

#### LIUS CALLIMICRIFORMIS, new species

Male.—Oblong, moderately convex, broadly rounded in front, more strongly attenuate posteriorly, strongly shining; head and pronotum cupreous, with a slight reddish tinge; scutellum and elytra dark greenish-blue, with a vague violaceous reflection; beneath black, with the prosternal process slightly cupreous.

Head with the front slightly wider than the transverse diameter of the eye, slightly wider at top than at bottom, lateral margins feebly converging from top to bottom, deeply, longitudinally depressed, the depression extending to the lateral margins, but becoming obsolete on the occiput, and without a distinct longitudinal groove: surface glabrous, densely, finely reticulate, sparsely, rather coarsely, irregularly punctate; eyes moderately convex; frontal pores large, narrowly separated; epistoma very narrow between the antennal cavities, strongly elevated, and the antennae nearly contiguous.

Pronotum moderately convex, twice as wide as long at base, distinctly narrower at apex than at base, widest at base; when viewed from above the sides nearly parrallel or feebly sinuate posteriorly, obliquely narrowed anteriorly; posterior angles obtusely rounded, not projecting; anterior margin feebly, broadly, arcuately emarginate; base feebly, transversely sinuate to middle of each elytron, then turning obliquely backward to the scutellum, in front of which it is feebly, arcuately emarginate; surface uniformly convex, without distinct depressions, glabrous, finely, densely reticulate, very sparsely, rather coarsely, irregularly punctate. Scutellum large, triangular, anterior margin arcuately rounded, the surface smooth.

Elytra moderately convex, slightly narrower than pronotum at base, subequal in width at base and behind middle; humeral angles obtusely rounded; sides nearly parallel from base to behind middle (feebly, broadly constricted in front of middle), then are uately narrowed to the tips, which are separately narrowly rounded, with the lateral margins entire; humeri not very prominent; surface glabrous, more or less rugose, densely, coarsely, irregularly punctate, the punctures becoming finer toward the apices.

Abdomen beneath finely, densely reticulate, feebly, sparsely punctate, sparsely clothed with short, inconspicuous hairs; last segment broadly rounded at apex, with the apical groove deep, following the outline of the lateral margins, but interrupted on each side of the middle at apex. Prosternum finely, densely reticulate, the anterior margin subtruncate and feebly elevated; prosternal process narrow, sparsely, coarsely punctate, the sides feebly, broadly constricted at the coxal cavities, broadly rounded at apex.

Length, 3.35 mm; width, 1.35 mm.

Type locality.—Real de Arriba, Mexico, D.F.

Type.—U.S.N.M. No. 49578.

Remarks.—Described from a unique male collected at the type locality at an altitude of 6,300 feet, July 16, 1932, by H. E. Hinton.

This species resembles Callimicra lucida Waterhouse, but it belongs to the genus Lius and differs from lucida in having the pronotum reddish cupreous, uniformly convex, and without lateral carinae, the head deeply depressed in front, the prosternal process narrow, with the sides constricted at the middle, and the metasternum very deeply and narrowly emarginate in front.

#### CALLIMICRA CYANESCENS, new species

Female.—Rather narrowly oblong, moderately convex, broadly, equally rounded in front and behind, rather strongly shining; above uniformly dark greenish blue, with a feeble violaceous tinge on the elytra; beneath piceous, with a vague aeneous reflection in certain lights.

Head with the front broad, moderately convex, subequal in width at top and bottom, lateral margins parallel, feebly longitudinally depressed behind the epistoma, and with a narrow, longitudinal carina extending from the occiput to a round, deep, median depression on the front; frontal pores very large, situated at the lateral margins and connected internally by a deep, transverse groove, which is interrupted at the middle; surface glabrous, finely, densely reticulate, sparsely, coarsely, irregularly punctate; epistoma very narrow between the antennal cavities, strongly elevated, the antennae nearly contiguous.

Pronotum moderately convex, one and one half times as wide as long, slightly narrower at apex than at base, and widest at basal third; sides feebly arcuate from base to middle, then strongly, arcuately narrowed to the apical angles; posterior angles obtuse; anterior margin rather strongly sinuate, with a broadly rounded, obsolete, median lobe; base transversely truncate to middle of each elytron, then turning obliquely backward to the scutellum, in front of which it is broadly subtruncate; surface broadly, deeply, transversely depressed along base, narrowly depressed along lateral margins, with obsolete lateral carinae extending from base to middle of pronotum, glabrous, finely, sparsely, irregularly punctate. Scutellum broadly triangular, anterior margin truncate, the surface nearly smooth.

Elytra moderately convex, about as wide as pronotum at base; humeral angles obtuse; sides nearly parallel from base to apical third (feebly, arcuately constricted at middle), then arcuately narrowed to the tips, which are separately rather broadly rounded, with the

lateral margins feebly serrate; humeri rather strongly developed; surface more or less rugose on basal halves, rather densely, coarsely, irregularly punctate, each elytron with a broad, deep depression along the lateral margin behind the humerus, and with a broad, deep, basal depression.

Abdomen beneath finely, densely reticulate, sparsely, finely punctate, nearly glabrous; last segment broadly rounded, feebly sinuate, narrowly truncate at apex. Prosternum glabrous, feebly reticulate, vaguely punctate, the anterior margin elevated at middle; prosternal process long, wide, sparsely, coarsely punctate, the sides arcuately narrowed to the apex, which is broadly rounded. Metasternum deeply, angularly emarginate in front.

Length, 3.75 mm; width, 1.4 mm.

Type locality.—Tejupilco, Mexico, D.F.

Type.—U.S.N.M. No. 45579.

Remarks.—Described from a unique female collected at the type locality at an altitude of 3,960 feet, during July 1932, by H. E. Hinton.

This species resembles *obtusa* Waterhouse, but it differs from that species in being slenderer and in having the pronotum more deeply depressed along the base and the elytra more coarsely punctured and more or less rugose.

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